

TRUSS CRAFT - REGRESSION MODELS BOOST THE BOTTOM
LINE

ABOUT TRUSS CRAFT. Truss Craft, Structural Components, Cheyenne manufacturing facility is geared to today's versatile building industry. Their hi-tech facilities enable them to meet the demands and time schedules of large commercial and residential contractors. They utilize the Mitek suite of design and shop software as well as the Wizard PDS automated jiggling system and a Monet DeSauw automated component saw. Truss Craft is a certified manufacturer of metal plate connected wood trusses for residential and commercial roof and floor systems. They are a member of the Truss Plate Institute (TPI), which assures quality control on every truss they make.

THE CHALLENGE. Truss Craft, Cheyenne was limited to bidding on small roofing construction projects under 50 roofs as management lacked confidence in their cost projection system software and the data it relied upon for cost estimation and could not risk the lack of return on investment (ROI) and potential loss in revenues on large projects. Consequently, they needed data analysis study of their historical truss manufacturing data and their multiple truss designs to review all their truss variables' costs estimation data to determine if there was the ability to narrow errors in their cost estimation procedures thus ensuring their ROI. The objective was to identify the errors in their historical data, correct it and apply the changes in their CRM software thus enabling them to bid on larger construction projects.

MEP CENTER'S ROLE. The Manufacturing Works, part of the MEP National Network™, provided a data analyst to review their historical data and various truss designs and understand their CRM software algorithms. The Manufacturing Works data analyst worked in concert with the management to determine where data could be refined to better serve the cost estimation system and reduce error. After multiple regression model designs and runs the error in cost estimation was reduced satisfactorily and the data will be presented to their Board of Directors in hopes of updating their data models for future use.

"We had a unique challenge that required a special talent for understanding data and applying an understanding of advanced mathematics to a CRM software model to improve cost estimation on increasingly larger roofing projects. We asked Jim Lee at Manufacturing Works if he could find such a talent and help us improve our estimation and control our ROI. Jim and Manufacturing Works came through at very reasonable cost and produced a solution that I will brief my Board on for further implementation to improve our Company's position."

-Ken Veltkamp, Operations Manager

RESULTS



new regression models reduced errors by **20%** plus saving thousands of dollars in larger project



new models facilitated bidding **50%** larger projects that may increase sales by 30% or more



the new models enabled the company to bid on larger projects in Colorado



new models facilitated increasing ROI by **10%** or more thus sustaining a viable workforce



new models enabled the company to bid on larger projects containing new truss designs

CONTACT US



Department 3362
1000 East University Avenue
Laramie, WY 82071-2000



(307)766-4817



www.manufacturing-works.com

